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Application No. 09/869,205

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

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1-25. (Cancelled).

26. (Currently Amended) A method of dialogue between a user and a software agent operating on a server, the software agent including a rational unit, said method comprising ~~the steps of:~~

receiving, by the software agent, statements in natural language originating from the user;

interpreting the statements in a logical statement that acts as input to the rational unit;

determining the existence of at least one behavioral principle applying to the logical statement among a set of predetermined principles;

deducing one or more logical consequences as a function of the at least one behavioral principle;

determining communication actions to be made corresponding to the deduced logical consequences, the communication actions being output from the rational unit;

transcribing the communication actions in a statement in natural language; and

sending the transcribed statement to the user,

wherein the logical statement at input to the rational unit and the communication actions at output of the rational unit are formalized in a communication language utilized as a communication language between software agents.

27. (Previously Presented) The method according to claim 26, wherein the communication language utilized as communication language between software agents is an ACL type language.

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28. (Currently Amended) The method according to claim 26, wherein ~~the step of~~ determining the existence of at least one behavioral principle further comprises ~~the step of~~:

verifying that the logical statement corresponds to a predefined axiom scheme and forms part of a set of data in the rational unit, the axiom scheme coding the behavioral principles.

29. (Previously Presented) The method according to claim 28, further comprising:

predetermining the axiom scheme and entering the predetermined axiom scheme into the rational unit declaratively as a function of a task to be carried out by the software agent.

30. (Currently Amended) The method according to claim 26, wherein ~~the step of~~ interpreting the statements further comprises:

in a first stage, determining concepts from the statement in a first stage; and

in a semantic completion stage, utilizing a semantic network connecting the concepts to one another, the semantic network being predefined and constituting a knowledge base.

31. (Currently Amended) The method according to claim 30, wherein ~~the step of~~ interpreting the statements further comprises:

in a weighting stage in the semantic completion stage, fixing a weight to each relation of the semantic network according to a notion of conceptual probability.

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32. (Previously Presented) The method according to claim 30, further comprising:
in a creation stage, creating at least one of new concepts and new relations between concepts enriching the semantic network.
33. (Currently Amended) The method according to claim 26, wherein ~~the step of interpreting~~ the statements further comprises:
taking into account the context of the statement.
34. (Previously Presented) A dialogue system between a user and software agent operating on a server, comprising:
a comprehension module adapted to receive statements in natural language and interpret the statements in a logical statement;
a rational unit adapted to receive as input logical statements originating from the comprehension module and suitable for determining the existence of at least one behavioral principle applying to a logical statement among a set of predetermined principles, to deduce one or more logical consequences as a function of the behavioral principles, and to determine communication actions corresponding to the logical deduced consequences; and
a generation module adapted to transcribe the acts of communication originating from the rational unit in a statement in natural language and send the statement to the user,
wherein the logical statement at input to the rational unit and the communication actions at output of the rational unit are formalized in a communication language utilized as a communication language between software agents.

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35. (Previously Presented) The dialogue system according to claim 34, wherein the rational unit comprises an inference engine and a set of predetermined data comprising axiom schemes coding the behavioral principles.

Please add new claims 36-43 as follows:

36. (New) A method of dialogue between a user and a software agent operating on a server, the software agent including a rational unit, said method comprising:

receiving, by the software agent, statements in natural language originating from the user, wherein the statements include semantic content;

interpreting the statements in a logical statement that acts as input to the rational unit;

determining the existence of at least one behavioral principle applying to the logical statement among a set of predetermined principles;

deducing one or more logical consequences as a function of the at least one behavioral principle, the consequences reflecting the semantic content of the statements originating from the user;

determining communication actions to be made corresponding to the deduced logical consequences, the communication actions governing semantic content of a response to the statements originating from the user and being output from the rational unit;

transcribing the communication actions in a statement in natural language; and

sending the transcribed statement to the user,

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wherein the logical statement at input to the rational unit and the communication actions at output of the rational unit are formalized in a communication language utilized as a communication language between software agents.

37. (New) The method according to claim 36, wherein the communication language utilized as communication language between software agents is an ACL type language.

38. (New) The method according to claim 36, wherein determining the existence of at least one behavioral principle further comprises:

verifying that the logical statement corresponds to a predefined axiom scheme and forms part of a set of data in the rational unit, the axiom scheme coding the behavioral principles.

39. (New) The method according to claim 38, further comprising:

predetermining the axiom scheme and entering the predetermined axiom scheme into the rational unit declaratively as a function of a task to be carried out by the software agent.

40. (New) The method according to claim 36, wherein interpreting the statements further comprises:

in a first stage, determining concepts from the statement in a first stage; and

in a semantic completion stage, utilizing a semantic network connecting the concepts to one another, the semantic network being predefined and constituting a knowledge base.

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41. (New) The method according to claim 40, wherein interpreting the statements further comprises:

in a weighting stage in the semantic completion stage, fixing a weight to each relation of the semantic network according to a notion of conceptual probability.

42. (New) The method according to claim 40, further comprising:

in a creation stage, creating at least one of new concepts and new relations between concepts enriching the semantic network.

43. (New) The method according to claim 36, wherein interpreting the statements further comprises:

taking into account the context of the statement.